# **Concord Light**

YOUR local utility

# LightLines

JAN.-FEB. 2012

A newsletter for Concord Municipal Light Plant's residential customers

# ELECTRIC HOT WATER SAVINGS

If your home has
ELECTRIC hot water,
you can cut costs and
help the environment
by signing up for Concord Light's off-peak
rate for your water
heating.

The rate works with an electronic switch on your home's electric

water heater.
Activated
through the
power lines
coming into
your home, the
switch allows

us to cycle power to your water heater during peak periods when power is expensive and generated by the least efficient plants.

In exchange, you'll qualify for our reduced off-peak electric rate for your water heating. To sign up or for more details, call us at 978-318-3101.

### **E**FFICIENT AND COST-EFFECTIVE

# Concord Light loves ETS

Concord Light now has more than 100 satisfied customers taking advantage of ETS—electric thermal storage—technology, including Concord Light's 33,000 sq. ft. Operations Center, which has been heated by ETS since 1998. It makes sense for individuals and the entire community, which is why Concord Light loves ETS.



### What is ETS?

ETS is a home heating system that uses ceramic bricks to store heat. The bricks are heated with electric heating elements during the early morning hours when electricity is least expensive, and then the stored heat is available all day long to be delivered by your hot air or forced hot water heating system.

Because Concord Light pays a very low price for the electricity used for ETS, we offer a rate that is much less expensive than home heating oil and very competitive with gas. In addition, Concord Light remotely controls the charging periods for ETS heaters to ensure the lowest cost possible.

### Why ETS makes sense

Our electric system's infrastructure represents more than a \$40 million investment. ETS makes sense for Concord because it helps us to more fully use our system during times when it is typically underused. In the summer, our system is fully used to meet high demand based on air conditioning. In winter, however, one third of our \$40 million investment goes unused. This gap will widen as air conditioning use increases.

ETS allows Concord Light to use our system investment more efficiently during the winter. Even though the rate we charge ETS customers is very low, the return on our investment helps improve our bottom line. This helps keep rates low for all customers.

### **Environmental benefits**

Because ETS units are typically charged during the early morning hours when the electric load in New England is very low, only the most efficient generating plants are operating. This, of course, is why the cost is low. More importantly, ETS systems use electricity generated by the most efficient generating units, which greatly reduces the environmental impact.

This past spring we used the ETS systems of seven homes in Concord to control demand to provide instant regulation to the grid. The project will continue for one more heating season and ETS, because of its storage capacity, has the potential to provide best in class regulation to the grid while substantially reducing the environmental impact of inefficient generating units.

### A simple solution

Finally, ETS is not a new, complicated technology but a simple, easily maintained heating system. In fact, Concordians have been using bricks to heat their homes and beds for hundreds of years! If you're interested in finding out more about ETS, call Carole Hilton at 978-318-3158.

# **B**UDGET YOUR BILL PAYMENTS

Would you like to smooth out your electric bill payments so they are evenly spread out over the year? Sign up for our Budget Billing option, and you will enjoy the convenience of predictable bills, regardless of the season.

Based on your past electricity use, we will estimate a projected use for the next year and then bill you an even amount for 11 months. Any difference between the estimate and your actual use may be amortized the following year or settled in month 12. Take advantage of this easy way to budget your electric bill payments. Call our office at 978-318-3101 for details.

### CONCORD LIGHT'S POWER SUPPLY PORTFOLIO

86.2% natural gas and nuclear from Morgan Stanley contract, Braintree and spot market

6.2% hydro power from Androscoggin River, ME and Niagara Falls, NY

4.2% landfill gas-fired power plant in Granby, MA

3.2% wind power from turbines on Spruce Mountain, ME

0.2% solar photovoltaic systems on municipal, state and residential rooftops in Concord

# Grant will fund pilot Smart Grid program

The American Public Power Association (APPA) awarded Concord Light a \$26,000 grant this fall to fund a pilot program that will pair Concord's Smart Grid system with additional technology and local volunteers to help make the power grid more efficient and reliable.

The grant, which comes from APPA's Demonstration of Energy-Efficient Developments program, will fund a project in Concord this heating season that will identify ways to keep energy prices down by regulating the power grid, reducing energy demand, and monitoring local line voltage.

Concord Light is partnering with VCharge of

Rhode Island to use their software and hardware with our Smart Grid network. We will work with VCharge and 26 volunteer homeowners who have electric thermal storage (ETS) heating systems. The project will provide grid regulation by turning the ETS units on and off as the grid requires to maximize efficiency.

With VCharge's innovative technology, Concord's Smart Grid network, and 26 of Concord Light's ETS heating customers, Concord Light hopes to improve the monitoring of distribution voltage problems, reduce energy demand, and improve grid reliability through a more responsive application of grid regulation.

## Wind project nears completion

In December, Concord Light began purchasing wind energy from the Spruce Mountain project in Woodstock, ME. Our share of the project will be approximately 9% of its output, or about six million kilowatt-hours per year. That will supply about 3% of our energy needs at a price of 9.925 cents per kilowatt-hour for capacity and energy over the next 15 years.



Spruce Mountain wind project, Woodstock, ME

# Experiencing financial hardship?

If you need help paying your electric bills due to financial hardship, there is help available from several sources.

The South Middlesex Opportunity Council (SMOC) administers the government fuel assistance program designed to help low-income people afford the cost of heat in the winter months.

For those currently enrolled in SMOC's fuel assistance program, Concord Light offers a re-

duced Residential Assistance rate for the first 500 kilowatt-hours per month of electricity and a reduced meter charge. The Good Neighbor Energy Fund, administered by the Salvation Army, offers grants based on higher income eligibility limits than SMOC.

For details on these programs or to consider other available resources or begin the grant process, call Barbara at 978-318-3153.

